

**CALR Antibody (monoclonal) (M01)****Mouse monoclonal antibody raised against a full length recombinant CALR.****Catalog # AT1373a****Specification**

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**CALR Antibody (monoclonal) (M01) - Product Information**

Application	WB, IHC
Primary Accession	<a href="#">P27797</a>
Other Accession	<a href="#">BC020493</a>
Reactivity	Human
Host	mouse
Clonality	Monoclonal
Isotype	IgG1 kappa
Calculated MW	48142

**CALR Antibody (monoclonal) (M01) - Additional Information****Gene ID** 811**Other Names**

Calreticulin, CRP55, Calregulin, Endoplasmic reticulum resident protein 60, ERp60, HACBP, grp60, CALR, CRTC

**Target/Specificity**

CALR (AAH02500.1, 1 a.a. ~ 417 a.a) full-length recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.

**Dilution**

WB~~1:500~1000

IHC~~1:100~500

**Format**

Clear, colorless solution in phosphate buffered saline, pH 7.2 .

**Storage**

Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.

**Precautions**

CALR Antibody (monoclonal) (M01) is for research use only and not for use in diagnostic or therapeutic procedures.

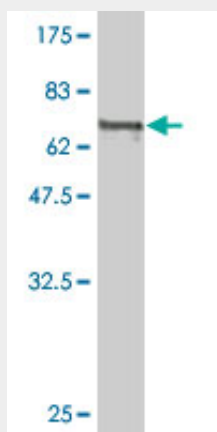
**CALR Antibody (monoclonal) (M01) - Protocols**

Provided below are standard protocols that you may find useful for product applications.

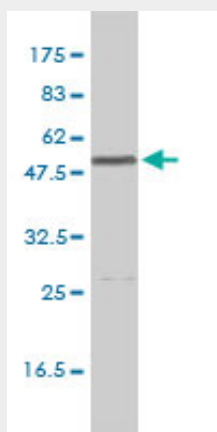
- [Western Blot](#)
- [Blocking Peptides](#)

- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

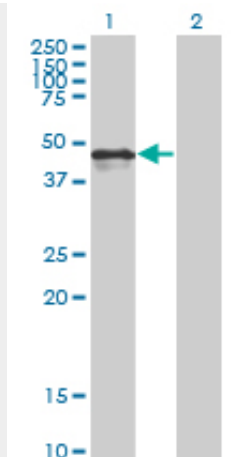
#### CALR Antibody (monoclonal) (M01) - Images



Antibody Reactive Against Recombinant Protein. Western Blot detection against Immunogen (71.61 kDa) .



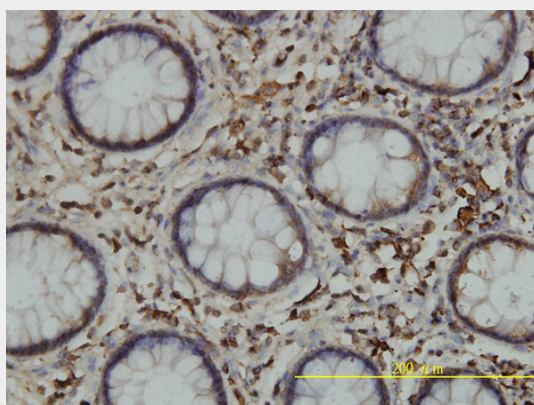
CALR monoclonal antibody (M01), clone 1G11-1A9 Western Blot analysis of CALR expression in K-562 ( (Cat # AT1373a )



Western Blot analysis of CALR expression in transfected 293T cell line by CALR monoclonal antibody (M01), clone 1G11-1A9.

Lane 1: CALR transfected lysate(48 KDa).

Lane 2: Non-transfected lysate.



Immunoperoxidase of monoclonal antibody to CALR on formalin-fixed paraffin-embedded human colon tissue. [antibody concentration 1 ug/ml]

### **CALR Antibody (monoclonal) (M01) - Background**

Calreticulin is a multifunctional protein that acts as a major  $\text{Ca}^{2+}$ -binding (storage) protein in the lumen of the endoplasmic reticulum. It is also found in the nucleus, suggesting that it may have a role in transcription regulation. Calreticulin binds to the synthetic peptide KLGFFKR, which is almost identical to an amino acid sequence in the DNA-binding domain of the superfamily of nuclear receptors. Calreticulin binds to antibodies in certain sera of systemic lupus and Sjogren patients which contain anti-Ro/SSA antibodies, it is highly conserved among species, and it is located in the endoplasmic and sarcoplasmic reticulum where it may bind calcium. The amino terminus of calreticulin interacts with the DNA-binding domain of the glucocorticoid receptor and prevents the receptor from binding to its specific glucocorticoid response element. Calreticulin can inhibit the binding of androgen receptor to its hormone-responsive DNA element and can inhibit androgen receptor and retinoic acid receptor transcriptional activities in vivo, as well as retinoic acid-induced neuronal differentiation. Thus, calreticulin can act as an important modulator of the regulation of gene transcription by nuclear hormone receptors. Systemic lupus erythematosus is associated with increased autoantibody titers against calreticulin but calreticulin is not a Ro/SS-A antigen. Earlier papers referred to calreticulin as an Ro/SS-A antigen but this was later disproven. Increased autoantibody titer against human calreticulin is found in infants with complete congenital heart block of both the IgG and IgM classes.

**CALR Antibody (monoclonal) (M01) - References**

1.The angiogenesis inhibitor vasostatin is regulated by neutrophil elastase dependent cleavage of calreticulin in AML patients.Mans S, Banz Y, Mueller BU, Pabst T.Blood. 2012 Aug 22.